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Prepared as an aid for prospective authors of study guides for correspondence study, this handbook provides information about the correspondence student, distinctive characteristics of correspondence courses, selection of textbooks, the structure of the study guide, tips for effective style, and preparation of examinations. The appendix contains sample pages illustrating cover pages, introductions, study notes and discussion materials, and excerpts from lesson reports. (pt)

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Bureau of Adult Education and Extended Services
182 Tremont Street
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HANDBOOK FOR AUTHORS

OF CORRESPONDENCE COURSE STUDY GUIDES

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PREFACE

Usually our correspondence courses utilize a standard textbook plus our own mimeographed study guides prepared specifically for each course. You are the prospective author of such a study guide. This handbook is our attempt to help you prepare for and write that study guide.

The information and ideas in this handbook are based largely on our own experience, but we are also greatly indebted to other schools and colleges that have provided us with their own handbooks. We found the following sources particularly helpful: University of California, University of Minnesota, University of Oklahoma, Pennsylvania State University, University of Utah, Washington State University, International Correspondence Schools and Extension Course Institute, USAF Air University.

The preliminary work on this handbook was done by Joyce Tully, a former staff member. All of our present professional staff--but particularly Sandra J. Schwartz--participated in the writing and/or evaluation of this handbook. Christina S. Hatch, a staff member, offered many valuable suggestions, and Pamela A. Halewood, another staff member, offered conscientious editorial service. The attractive appearance of this handbook is due largely to the secretarial service of Janice P. Cipoletta.

Before stencil-cutting began, however, several study guide authors and faculty field tested the manuscript and gave us the benefit of their experience. We acknowledge especially the help of Dr. John Jablonski and Professor Elizabeth Hemmerly, both of Boston University, and Mrs. Jane Hatfield, Cambridge Editorial Research, Inc.

With the help of our study guide authors, our faculty, and others, we may some day prepare a still better handbook to guide us all in teaching by correspondence.

Robert B. Wentworth
Supervisor
Correspondence Instruction

November, 1965

HOW THE STUDY GUIDE AUTHOR AND THE OFFICE OF CORRESPONDENCE INSTRUCTION WORK TOGETHER

No two study guides are developed in exactly the same way. Usually, however, we begin with the idea that there is a need for a certain new course or that an existing course needs major revision. Our role in the office is to outline needs, enforce standards, stimulate thinking, and encourage the development of a quality product.

Who will write the study guide - the present instructor or someone else? Once this decision is made by the Supervisor, he or a member of the professional staff confers with the prospective author. As soon as the general concept and objectives of the course are decided upon, an agreement needs to be reached about a text. (See section on selection of text.)

Once we are in at least substantial agreement about the text, usually we ask the prospective author to submit a rough outline of the course and a sample lesson. If this sample is acceptable, a financial agreement is reached and confirmed in a letter of appointment.

After a tentative deadline has been agreed upon, the author is ready to proceed. The Supervisor or a professional staff member will keep in touch, looking forward to the day when the author submits a completed manuscript, typed double-space so that changes or corrections may be made easily. Meanwhile, we in the office follow a check list as the study guide proceeds towards completion.

But this is not the end. Even the most experienced author will want his manuscript reviewed by others. Ideally, four people should review the manuscript - the author himself, the instructor or another person competent in the field, the Supervisor or a member of the professional staff, and a person with the viewpoint of the prospective student. We at the office must see that there is adequate review and that we have, thanks to everyone, a manuscript to be proud of.

Now stencils must be cut. This calls for a skilled typist and careful proofreading. Usually the author is spared the final typing and proofreading, but if the material is very technical the author may well want to proofread the stencils.

When the mimeograph machine starts running, we are near the end of the trail. Meanwhile, the texts have been ordered. We prepare a one page flyer announcing the new course or major revision. When all is ready, the course goes on sale over the counter and through the mail.

Now before you begin to write, you need to know something about the people to whom your message is to be delivered. We don't know as much as we'd like to know about our students, but we'll share some of our significant observations with you.

The Bureau of Adult Education receives about 3000 correspondence course enrollments each year. This number does not represent the same number of people since many enroll more than once, but we do have a large and varied student body.

The age range includes some high school students taking our adult courses by permission of their principal or guidance counselor, college students, highly-motivated high school dropouts, adults taking a single course to further a cultural interest or to improve job efficiency, many inmates of correctional institutions, hospital patients, and intellectually curious Senior Citizens. The majority of students are between the ages of 21 and 40.

Inmates in our state and county correctional institutions comprise nearly 40 percent of our new enrollments. Some of these inmates are in their late teens; many are adults with the same variation of interests and abilities found in the world outside.

Among the inmates and among employed adults, many are working toward either a local evening high school diploma or the state high school equivalency certificate.

A typical correspondence student comes from a low income or middle income bracket. In many instances he lacks self-confidence because he has been away from school for some time and doubts his ability to achieve the amount of education he feels he should have. Social pressure gets him at least interested in a correspondence course. The course itself, we hope, will further this interest and fulfill his needs. Our typical student has lost the "know it all" attitude of youth. The adult, unlike the high school student, has a number of years of living experience in addition to his specific learning needs. He is now ready and willing to undertake something new <u>if it seems worthwhile</u>; if the course ceases to be worthwhile, the adult usually departs silently.

A correspondence course is not merely a substitute for a class course. It has its own inherent values. Perhaps the following are the most important:

... A close teacher-student relationship.

... An emphasis on solo activities.

... An opportunity to proceed, to a large extent, at one's own pace, competing with oneself rather than with others.

... The development of self-discipline and good study habits essential to independent study in college and many life situations.

... Full participation by the student each time faculty and student "meet together" through the correspondence assignments.

... An opportunity for a study environment of privacy. Besides aiding the concentration of the correspondence student, private study encourages freedom of thought, expression, and criticism which are often repressed in group situations.

In a class course, each student usually studies a textbook and receives considerable oral instruction. In a correspondence course each student uses a basic text (and often also a book of supplementary readings and/or a workbook) and receives additional instruction through a study guide. In both types of instruction, the course frequently requires considerable written work on the part of the student. Also frequently required of both the class student and the correspondence student is the satisfactory completion of a supervised final examination.

It should <u>not</u> be assumed that a class course in a given subject is, by its very nature, superior to a correspondence course covering the same subject matter. There are many variables which make it difficult to compare the two methods of teaching. Contrary to what many people believe, however, there is some research evidence, based on controlled experiments, which seems to show that correspondence students do even better than class students!

By now you realize that a correspondence course usually consists of the published text materials and the mimeographed study guide, written by someone like yourself. The published materials, the study guide, our pamphlet "How to Study a Correspondence Course," Personal Information for Your Instructor (a form to be completed by the student and submitted with lesson 1.) and lesson paper comprise the package which is mailed to the student or delivered to him personally when he enrolls.

But packages differ. Some are relatively short non-credit courses which offer cultural advantages and/or practical self-improvement in a variety of subjects. Some are the standard high school subjects essential to the adult who needs an evening school diploma or a high school equivalency certificate.

Our correspondence catalog groups the course offerings into the following categories, listing both non-credit, high school credit, and college credit under the same headings whenever courses of more than one level are available. The subject groupings in the 1965 catalog are: art, automotive, business administration, civil service and license preparation, education, engineering, English, industrial management, languages, mathematics, music, sciences, and social sciences. The propective author of a study guide should familiarize himself with the course descriptions in the catalog, noting especially those in courses related to the one for which he will prepare the guide. In some cases he may want to look at study guides in related courses.

A course which is offered for college credit through correspondence study should be equivalent in quality and quantity to the work in the same subject offered for the same class credit by an accredited college. Each assignment should represent the work done by a student of average ability in eight to twelve hours of attentive study. The equivalent semester hour value for a correspondence study course is one semester hour for each eight assignments. (A college level correspondence course containing 24 assignments would have a value of three semester hours.)

A high school credit correspondence course should likewise be equivalent in quality and quantity to the work covered in the same subject during one academic year of high school. An adult correspondence course offering one high school unit of credit must cover the essentials of the work offered in a secondary school class which meets 180 days a year. The number of assignments may vary between 16 and 24, depending on the nature and difficulty of the work. College preparatory subjects, for example, will usually require more work than general or commercial subjects and may require more lessons. The minimum requirement for one high school unit of credit is 16 assignments, each requiring at least 8 hours of attentive study by the average adult.

A non-credit correspondence course may offer subject matter on the grammar school level, subject matter which does not require a high school education for comprehension. However, a non-credit course is not necessarily easier than a college or a high school course; it may be just as demanding of the student as a credit course, but too specialized in nature to offer either type of credit. Also, it may be so experimental that specific work requirements are difficult to establish.

The number of assignments in a non-credit course has no definite limit, but such a course usually has 8, 10, 16, or 20 assignments. The amount of work required, however, must be substantial for the ability level of the student for whom the non-credit course is intended. This flexibility is permissible because there are no specific credit standards.

A thoughtful selection of textbooks and required materials should be made before a study guide is started. When making this selection, remember that a book which might be ideal for use in a class may not be readily adaptable to home study. In the classroom an instructor can orally supplement the text and indicate emphasis as he sees fit. The correspondence student receives this additional assistance primarily from the study guide. The author, therefore, should select textbooks that require the minimum of supplementary discussion and clarification.

Here are some suggested questions you might ask when considering a text to recommend:

... Does the proposed text significantly further your stated objectives for the course?

... Does it tend to be an adult text in its language, rather than a text specifically directed to teenagers? This is significant even if the course is a high school credit course. Note that some publishers are now introducing texts in an adult education series.

... Is the content of the text relatively clear and complete in itself or does it require considerable amplification?

... Does the text proceed from the known to the unknown, bearing in mind the background and abilities of the students? The text should have adequate background and review material.

... Are the illustrative examples in the text particularly good as to completeness, clarity, variety, etc.? The examples should be practical and typical.

... Is the text comprehensive enough for the student who has limited library facilities or none at all?

... Is the text objective rather than biased toward a particular point of view? Are different viewpoints considered and discussed? To some extent, other views and explanations should be included in the study guide, but the text should also provide some divergent views on the subject.

... For a practical course, is the text really applicable? Could the student refer to it as a source of information on his job? The student should be able to apply what he learns from a practical course directly and immediately.

... For a course in which appreciation is one of the values to be acquired, how well does the text provide for the different tastes of individual students? For example, are there some selections of special interest to men and to women, some for the idealist, some for the man of affairs,and some for the man of convention? The author of the text should share his appreciation of the works being discussed but realize that not everyone will agree. he should not, for instance, arbitrarily assume that because the selection is a classic, everyone must enjoy it.

... Can one or more paperbacks be used more effectively than a standard hard-cover text? Note the price advantage!

... Is the text up-to-date, easily obtainable, and one that will be available for purchase over a period of several years?

... Will a substantial portion of the text be used in the course?

... Are "programmed materials" available which could be used effectively? Such texts are useful in teaching facts.

... Will a workbook or laboratory manual be useful or does the study guide suffice?

... Is the desired text reasonably economical or can another equally suitable text be purchased for less?

... Have several texts been considered before making the final recommendation?

Although we have spoken of the text as if it were a single book, this need not be the case. A text and workbook combination is sometimes desirable. Several paperback texts might be more suitable than a simgle hard cover text. Cost to the student is an important factor. At current retail prices, a good text frequently costs around $8. Usually $10 should be considered the upper limit for any text or combination of texts required.

The text selection should be determined initially by the author but it is subject to the approval of the Supervisor of Correspondence Instruction. Remember that the materials and textbooks for a correspondence course help to establish the climate of learning, and for the adult this climate of learning is almost as significant as the factual content of the course materials.

At this point we will outline the structure of the study guide and mention some of the parts which frequently appear in it. In later chapters we will discuss the more original or creative aspects of the contents and offer suggestions for making the study guide distinctive.

Cover Page

Correspondence courses are often divided into parts which may be sold separately. In credit courses, one part usually represents the work of the first semester while the following part represents the work of the second semester. A cover page is required for each part.

The cover page includes the heading, the title of the course and part number; if a credit course, the amount of credit offered for the successful completion of the total number of assignments and a supervised final examination; if a non-credit course without examination, the total number of assignments; the required text(s) and materials, stating the author, title, name of publisher, edition and date of publication; the full name and title of the author of the study guide; the statement "All copyright privileges reserved" and the month and year in which the course was completed. (See Appendix for a sample title page.)

Introduction

Many students will be taking a correspondence course for the first time. Our pamphlet "How to Study a Correspondence Course" explains informally and in detail how to study a course, how to prepare written lessons, how to prepare for an examination and how to take an examination. You may want to repeat some of this advice for emphasis.

Here are some additional specific suggestions which may indicate points appropriate for the introduction to your particular study guide:

... A brief description of the subject field might be called for. How is this subject related to other subjects? What are the prerequisites?

... What are the academic and practical values of this course? How can a student make use of what he learns in this course?

... What is the purpose or objective of the course? What will be taught?

... What exactly is expected of the student in terms of study, written work, supplementary exercises, etc.? What end result should he achieve? What is required for successful completion of the course?

... How do you advise the student to approach each assignment? Or, in other words, how would you ideally expect the lessons to be done? What specific study procedures would you suggest? Perhaps the student should read the author's discussion

material first for an overview, then study the text assignment carefully, then read the study guide discussion again for summary and review before doing the written work. Is this the best way or is a variation of this procedure desirable? Would you recommend that students take notes on the study assignment? If so, what kind of notes? Should students prepare a formal outline of what they have studied or would it be better for them to write an interpretation of what they have read?

... To what extent should the student seek help? Is it desirable to discuss the work with others? How should the book be used so it will be a help and not a crutch?

... Why was a particular text chosen? Would you like to tell our students what you know about a text and its author? Be sure to mention at least the text and other required materials.

... In your own way, point out that each lesson submitted is the student's chance to prove not only to his instructor but also to himself that he is mastering the important ideas or skills of the assignment.

... Somehow re-emphasize what is said elsewhere---that a student learns best when he waits to receive a corrected lesson before submitting the next lesson. Much of the benefit is lost if he does not examine, understand the reasons for, and benefit from his errors.

... Would an annotated table of contents for the entire course be appropriate in the introduction? It might state briefly what is covered in each assignment.

... A distinction should be made in the introduction (or in the lessons) between the required book(s) for study and optional references which the student may find beneficial if he has the time, energy, and library facilities. If additional study material, written exercises, etc. are required of college preparatory students, this fact should be pointed out clearly.

... This statement should appear at the end of the Introduction: Send all your lesson reports to this address:

CORRESPONDENCE INSTRUCTION
Bureau of Adult Education & Extended Services
182 Tremont Street
Boston, Massachusetts 02111

Parts of a Lesson

Each lesson is usually divided into three parts which normally appear in the following sequence: (1) the study requirement, (2) the discussion material, lecture notes, or commentary, and (3) the lesson report to be submitted for correction (the homework).

The study requirement The study requirement is merely a statement of the text material which is to be studied, usually designated chapters in one or more texts. It refers only to required material, usually that provided with the course. Additional suggested readings should be clearly indicated; perhaps you may want to list them at the end of the discussion material.

The discussion material This, by whatever name it is called, is the main substance of the study guide. Here are some pointers which indicate the minimum requirements of a good commentary. In subsequent sections of this manual numerous suggestions will be made which will help you to write distinctive lecture notes. Meanwhile keep these things in mind:

... The discussion material complements, interprets, and, if necessary, explains the text. It may include diagrams, charts, illustrations, and instructions such as you might give in the classroom if you were teaching a class. It may have a heading like a chapter title to stimulate interest.

... Anticipate student questions. What would a class student ask? Your study guide must provide answers to questions before the questions are asked. Otherwise the student waits too long for the answers on his corrected lessons.

... The discussion material may be at the same time a preview, an overview, and a review of the subject matter of a particular lesson.

... There is no set length for the discussion material nor need it be the same length for each lesson. A page single-spaced may be sufficient in some instances; frequently several pages of concise material are desirable for a single lesson.

... The discussion material is a teaching device. In it the author shows his personality by talking to the individual student. It is a personal message and may include case histories from personal, business, or professional experience.

... If you use illustrative problems in your course, give the student an opportunity to test his knowledge of the principles covered by inserting at intervals groups of practice problems, the solution of which will be given at the end of the problem. These problems will not be submitted for correction. The statement of a practice problem should be much like the statement of the illustrative example because the student is expected to use the illustrative example as a guide in solving the practice problem.

... By the same reasoning, you may want to include trial tests along with the discussion material.. Sometimes these tests are self-scoring; in other instances they may be submitted to the instructor, but the grade is not included in the lesson average.

... Sometimes it is helpful in the lecture notes to make frequent references to specific pages and passages in the text. This encourages a more careful study of the text and indicates what you consider particularly important.

... Simplified phonetics, which enables our student to speak names and technical words as easily as class students do, is very much needed. In an art course, is Degas spoken as "dug-ah," "day-gar," or something else? Do not use dictionary methods of indicating pronunciation but rather follow the example of popular magazines such as Time (rhymes with lime).

... An annotated bibliography, if skillfully written, may add considerable interest to what would otherwise be a dull list of references. You may want to include new references or comment interestingly on some of those listed in the text. The personal opinion of the study guide author is appropriate if it is labeled as such.

... Current events, especially if dramatic in nature, add interest to a manuscript, but remember that your reader may be reading your message several years from now. If the event seems likely to have lasting significance it might be referred to as occuring in 1965, but avoid incidental references which would easily date the course. Write so that your words will (in most subjects) ring true for five years at least, but perhaps forever.

... You, as the author, should suggest things that the student can do with limited library facilities or possibly with no library facilities at all. In a science course, simple experiments which can be performed in the home or with simple ingredients available in prisons should be stressed.

... Your discussion portion of the study guide, when used with the required text (s), should provide all the information the student is likely to need within the limits of the objectives of the course. It is better to give too much information rather than not enough, since the only sources the student can be expected to have are the study guide you are writing and the required text(s). Although a study guide must be adequate enough to satisfy an experienced student, you should assume the student's knowledge and experience are limited.

... In short, spell things out, clearly and specifically. Your style should be your own, but keep in mind an intimate teacher-student relationship. Constantly encourage our students to collect factual data, but help them to think and find meaningful uses for their data.

... William Shakespeare is popular because he appeals to everyone from the sophisticate to the groundling. He wrote for the masses, but his message is heeded by the individual. This should be the goal of the correspondence course author -- not to become another Shakespeare but to strive toward total, individual communication.

The lesson report Every lesson must have a written lesson report which is demanding of the student both as to quantity and quality. The first lesson may be simpler and briefer than the others, and the lessons may increase in difficulty, but there should be, for the most part, an overall consistency in the work load.

Some other essentials of the lesson report are the following:

... Questions or problems must encourage thinking as much as possible. Questions which can be answered by a simple "yes" or "no" or by copying a brief passage from the text or study guide are unsuitable.

... In devising the questions, consider problems which arise in grading. What percentage value is assigned to each question? Should all questions have equal weight? If not, indicate the relative weights.

... Does the lesson report provide an adequate coverage of the entire assignment? Do the questions indicate the relative importance of the material covered?

... Have you indicated clearly and exactly what you expect the student to do? If directions are not specific, have you explained to the student why the questions are general in nature?

... Have you made provision for individual differences? Perhaps there should be a choice of questions, the choice being suggested by the experience, sex, sophistication, or personal tastes of the individual.

... Have additional questions been provided for college preparatory students (if appropriate)?

Make sure that the questions in each lesson report are challenging enough to give a good indication of a student's progress. Each lesson should be so designed that the average student will earn a grade in the 70s or low 80s and only really outstanding students will earn A grades. Correspondence instruction has been criticized as being a "too-easy" way to make good grades. If your lesson report requirements are as good as they should be (and assuming a conscientious instructor), the criticism is not valid.

If another person is to teach the course, have you conferred with the instructor about the lesson report?

So much for the structure of the lesson report. A subsequent chapter will offer more detailed suggestions for developing interesting homework assignments.

It is probably safe to say that any course can be related to life. Some courses, however, relate much more easily than others. As author of the study guide, you should be sufficiently imaginative to find ways of your own to fit the content into true life situations. Furthermore, you should not be content with utilizing just the most obvious ways of making the content realistic; discover other ways which are not obvious.

Your subject does not exist in a water-tight compartment. Use an interdisciplinary approach as much as possible. Biology is related to other sciences, but it is also related, directly or indirectly, to much of human knowledge outside the sciences. Man's biological structure and his environment influence his social, economic, political, and religious thinking.

Our course in Typewriting is an excellent example of realism in the field of business courses. The assignments in typing seemingly put the studemt in the classroom where he can "hear" the personalized comments of the instructor. He types a few lines, then he "hears" the comments of the instructor, examines his work for errors, then "hears" what he should do to correct these errors.

Gregg Shorthand is based on the Gregg Diamond Jubilee text-kit which includes a set of plastic phonograph records. Both the text-kit and study guide "put the student into the picture" in ways of particular interest to working men and women. The study guide is written in narrative form; it recounts in detail the experiences of a young man and a young woman as they learn shorthand by correspondence. The new Gregg makes it possible to acquire a usuable skill in a relatively short time and at less effort than before. Throughout the course, the learner hears the sound on a record at standard rates of dictation, sees the character in the paperback text, and writes the character at the same time.

Engineering courses offer so many opportunities for creative thinking that a few random samples will have to suffice. What new objects might students design which would have practical use? How about a wheel chair which will go up steps easily? Can't we have a motorized lawnmower which will run silently, especially on Sunday mornings? Why not a typewriter which prints music?

In radio and television courses couldn't students be encouraged to use known principles in the development of imaginative modifications of existing equipment? What improvements in radio and television equipment might meet consumer needs and desires? Why not work on a curved screen, a portable wall screen, or a remote control device by which the viewer might adjust the size of the picture according to the nature of the action? Naturally we do not expect complete inventions, but certainly our students can develop some realistic and worthwhile proposals.

Instruction in science courses may sometimes verge on science fiction, but why not, since the science fiction of today is often the real life of the future? Visitors at the 1939 New York World's Fair will recall the imaginary highway system of the future which is being realized with the intricate interchanges in our present interstate road system.

Biology is the science of living things. What should the adult know about the use of cigarettes, alchohol, and narcotics and their effect upon the human body? What material and physical changes take place in our bodies at different ages when we engage in various forms of physical activity? What are some practical household hints on the cooking of vegetables, the preservation of frozen foods, and the use of fresh orange juice, and, more important, what are the reasons for the recommended practices? Beyond that - and into the realm of the creative - how can we use our knowledge of biology to "grow" floating cities of algae, complete with a living food supply tasty enough for human consumption?

Our course Technical and Shop Mathematics (1 HSU), for example, will obviously need to contain practical problems drawn from actual shop practice. But is this enough? Are there not principles which will apply long after the shop equipment of today is obsolete? What about the shop of the future? What do you foresee for the future and how may the knowledge and skills now offered be applicable then? What tolerances may be necessary for new types of equipment, such as hydrafoil vehicles and fully-automated automobiles? How will such tolerances be computed?

Life continues. Will your material be significant next year or five years from now? Fifty years ago tolerances of one-tenth of an inch were acceptable; now tolerances of less than one-millionth of an inch are required in space satellites.

Consider another mathematical example. Our non-credit course Everyday Arithmetic is related to life in that it teaches the minimum mathematical skills needed for everyday living. That is the obvious relationship. But we went further and applied these skills to various specific situations.

What arithmetic is used in the home? We need to know how to use arithmetic in order to spend money wisely. How much does it really cost to buy goods on the installment plan? How much does the sales tax add to the cost of goods? How are bank charges on checking accounts figured?

If the recipe calls for two-thirds cup of sugar and one-quarter cup butter, how much of each is needed if we are to double the quantity? If we are to make only half as much?

How else is arithmetic used in the home? The newspaper says the real estate tax rate will be $76. How much tax must we pay on our home? Should we commute to work by bus or by private car? How much does each method really cost? And so on. A whole series of related problems may be built around a single concept such as the average family and its physical surroundings.

This imaginative course includes a real numbers game for motivation and an adventure narrative which reviews all the skills taught in the course. See Appendix.

Language courses may be related to life by being related to the lives of people who speak the language. Anyone who has conscientiously studied a foreign language beyond the beginning level must have some feeling for other peoples, realizing that their hopes, problems, and achievements are similar to his own. It is surprising, for example, to learn that many discoveries or inventions we may think of as being American actually are of French or other national origin.

Why study a foreign language? The values should be spelled out in terms of how the lives of typical students will be changed. Will it contribute to business success, ability to get more from travel, cultural appreciation, etc? Some of the most obvious usefulness may be overlooked unintentionally. What do common French phrases (c'est la guerre) really mean? Can we translate the Latin motto on the state seal or interpret the motto on a public building?

The "dead language" Latin can come alive if you relate it to contemporary language (the development of our language) and if you compare the social and political problems of the early Romans with those of contemporary America.

Every teacher of literature is familiar with the vicarious experience which can be shared through great literature. Literature can help us to profit from life's defeats as well as to help us appreciate the joys of life. Adult students will recognize this truth more readily than young people. Why not take advantage of the adult's ability to relate what he reads to his own experience?

What in literature, for example, might help an adult in his interpersonal relations and in his on-the-job decisions? Some suggestions will enable the adult to find meaningful answers of his own. The answers might be "fed back" through written exercises.

The military services consider literature an essential part of an officer's training. The need is not purely social. Often in a tight administrative or combat situation, when the regulations offer little help, the memory of an incident or a principle from great literature may prompt a wise decision or provide the necessary courage for decisive action. Perhaps merely to remember "To thine own self be true" will be enough.

Courses in English grammar and composition are abundantly supplied with exercises in writing letters of invitation, thank-you notes, and employment applications. The recommended practices are certainly technically correct, but the examples are not always as imaginative or warmly personal as they might be. The stereotyped employment application, for example, may gain its writer an interview, but a more personalized letter with a functional data sheet will have far greater impact with the men who make the hiring decisions.

But why not also devote attention to many other of life's critical situations which call for thoughtful letters? Here are some examples; you will think of others. At one time or another we need to know how to write a warm letter of sympathy to a very dear friend or a close relative, to break bad news to someone we love, to resolve an annoying difference of opinion with one's fiancée, to persuade a legislator to take a definite course of action, to ask someone to give us something we want, to be a dutiful son or daughter away from home who writes every week without asking for money, to be a proud parent who comments on the hometown news and family activities without being overpossessive. Can we even teach how to write a love letter which will express affection, giving understanding and concern without being foolishly sentimental?

Are music courses so thoroughly structured that they provide little opportunity for new approaches? No, even a somewhat technical course in music provides many opportunities for imaginative and realistic treatment. Our head instructor in music developed an upside-down melody. Play it on the piano right-side up or upside-down; the tune sounds exactly the same either way! This is an effective demonstration of the structure of melody. In another instance, the instructor asks the student to draw a line from notehead to notehead to discover audible arcs which correspond to the visible arcs of the human anatomy. Close relationships exist, even in the most unexpected places! Look for them.

The social sciences provide abundant opportunity for relating subject matter to life. In a course in economics you might well ask a student to select from his daily newspaper items which are not obviously about economic activity and indicate the economic implications of each. Can he find an item which has no economic significance? (Probably not.) Students might be encouraged to compare our marketing system with the functioning of a telephone exchange or the human circulatory system.

History courses relate to life easily because history is the drama of living experience. If we are overconcerned with long lists of dates and the platoon movements of each major conflict, we miss the chance to see life and to see it whole. We should be realistic. Has any nation, despite a glorious heritage, always acted wisely, rightly, or even decently?

The distinction between politician and statesman is not always clear-cut. Those we now know as statesmen of the past were often regarded as the politicians of their day. Great men, we must realize, had great weaknesses and great temptations as well as great achievements.

Make events of the past seem as exciting as events of today. Show that the leading figures of the past were as lively and real as our leaders today. Show that neither virtue nor corruption are the sole characteristics of any given age. Show that history repeats itself--with variations--and that to be trusted with the shaping of the future we need to be fortified with knowledge of the past.

These examples should give you some ideas for your own field. But remember that your best ideas may not come from the suggestions for your own field but by analogy from ideas in another field not closely related. Use a good idea whatever its source!

A student is primarily interested in himself, not students in the abstract. Our message in the study guide, therefore, should be to the individual student, not to a mass audience. Many different real individuals comprise the total readership of the study guide. But each one is reached best, not by formal praching to the group but by an individual person-to-person message. You, the author, should speak directly to you, the student.

Just as the personality of the teacher is revealed in the classroom, so must the personality of the author be revealed in the study guide. Just as the successful teacher seems to talk to each individual in the class, so must the successful author seem to talk individually to each reader, one at a time.

Because students have varying levels of ability, some will interpret the written message better than others. But all will respond to the you attitude. Say you rather than the student!

Keep your language relatively simple. Short words are often preferable to long words having the same meaning. Naturally you will use words which are in common usage in the field. Technical words should be used when necessary, but be sure to explain a technical word when it is first used.

Sentences should be simple and concise, but never sacrifice meaning for the sake of brevity. Paragraphs should be relatively short because long paragraphs tend to overwhelm readers. It may be necessary to use two or more paragraphs to convey a single idea.

Examples, graphs, diagrams, illustrations, and other devices help carry the message. Here are several style devices which have often proved effective.

When you present a formula for the first time, it is best, according to International Correspondence Schools, to arrange it and define the symbols in the following manner:

The horsepower of an internal-combustion engine is found by the formula:

$$P = \frac{plAn}{33{,}000}$$

in which: P = power, in horsepower

p = unit pressure in cylinder, in pounds per squar inch

l = length of stroke, in feet

A = cross-sectional area of cylinder, in aquare inches

n = number of revolutions per minute

You might tell a story, concerning an actual event or an imaginary one, in an informal manner.

You may use exciting dialogue to dramatize important points. The dialogue may be imaginary as long as it illustrates the point.

Perhaps lively quotations, which are likely to stick in the mind and remind the reader of fundamental concepts, will enliven the material. In quoting copyrighted material from a source other than the text, bear in mind that the permission of the author and the publisher are required. Often, however, it may be sufficient to indicate the substance of the material, giving credit to the source. This use does not require permission. But be careful to avoid close paraphrase which would, ethically at least, require permission.

Controversy lends dramatic interest and even a touch of intellectual honesty. Have you pointed out differences in viewpoint among authorities? In the arts, literature, and the social sciences several different interpretations may be significant. You may wish to indicate two or three interpretations and encourage each student to evaluate them and/or add an interpretation of his own. (What does this painting, poem, or event mean to you?)

Speaking of controversy, you may find yourself involved in some unexpected controversy over the meaning of certain problems or questions in the lesson report. Will you (if you are the instructor) accept any reasonable interpretation of the problem that does not violate facts? We hope you will.

Why not use an analogy, particularly an analogy drawn from other subject areas which may be more familiar to the student? Sometimes even obscure analogies are significant. For example, suppose you were a hungry automobile. Wouldn't you like to drive up to a cafeteria gas station and choose your own food? This analogy led to the development of custom blending at the pump as now practiced by Sunoco.

If you are specific in a personalized way, you will be more interesting than you would be otherwise. Here's how:

VAGUE: This car is economical on gasoline.

BETTER: The Vauxhall averages nearly 30 miles a gallon on long trips.

STILL BETTER: Give the compact Vauxhall 10 gallons of gasoline and drive the 250 miles from Boston to New York and part way back without refueling.

It's a good idea to use lively action verbs and colorful descriptive adjectives - as lively and colorful as your material permits.

Don't be afraid to introduce a little humor. What amusing mistakes have students made? What humorous incidents have taken place in history? Or can you state the facts in an amusing way now and then for a change of pace? (The Air Force Extension Course Institute of the Air University does this very successfully even in its technical courses.)

WAYS OF PROVIDING FOR REVIEW

It is not enough to say that certain chapters should be reviewed at a given point. The whole structure of the course should force a student to review whether he chooses to or not. Furthermore, encouragement to review should occur throughout the course, not merely at the end of a part or at the end of the course.

Some suggested review techniques follow. You will doubtless be able to devise many of your own.

... In your problems and/or written assignments, deliberately include some questions which pertain to previous lessons. The typical student will make errors in his work; the instructor corrects these errors. The instructor will then want to discover if the student has profited from the corrections so that he can perform a function correctly when he does not realize he is being tested on that function. Can he punctuate correctly when he is not doing an exercise in punctuation?

... You may wish to prepare an optional supplementary exercise which may or may not be graded. The student's later lessons will show whether he made use of the extra help successfully. (In the typewriting course, for example, students who are weak in typing capital letters are sent an extra drill sheet. If they follow this exercise carefully, their subsequent lessons will show the improvement.)

... You may wish to include in the course, from time to time, sample tests of the self-testing variety. Self-testing examinations spare the adult student the embarrassment of exposing his mistakes to others and economize on the instructor's time in making corrections. They also give the course added flexibility.

... Summarizing comments in your lesson notes can make some provision for review. You might say, for example, that "In lessons 7 and 8 you did...Now you will carry this same skill one step further. Take another look at..."

... Ask the student to criticize or evaluate, perhaps comparing present material with earlier materials in the course. Is he now better able to explain <u>why</u>? Suggest a comparison, for example, between the depression of the 1930's and the 19th century economic slumps. Now that he has completed Lesson 14, would he answer a question in Lesson 2 the same way he did then? Review can promote growth as well as measure progress.

... Develop your own distinctive ways of forcing each student to review. A crossword puzzle is included in one assignment of English for Everyone, a new course in grammar review. The puzzle not only makes the course more interesting and aids vocabulary building (one of the objectives), but since many of the definitions pertain to information in previous lessons, the student is enouraged to review.

... By all means personalize your review as everything else. You may even want to say to your students, "Now do you feel that you can...?"

HOW TO MAKE THE REQUIREMENTS OF THE LESSON REPORT DISTINCTIVE

Now we come to the homework assignment which the adult student is asked to submit to the instructor for correction and teaching comments.

The purpose of the lesson report is not just to measure the student's knowledge but to encourage him to think. This is true regardless of the level or difficulty of the course. Avoid questions which can be answered adequately merely by a direct quotation from the text or study guide. Mathematical computations (they reveal reasoning) should be shown. An interpretation of a fact may be more important than the fact itself. (Some facts are outdated rather quickly; the ability to interpret never goes out-of-date.)

Insofar as possible, have a student do something other than just write answers to questions in a routine way. An activity in process generates its own interest. Lacking the stimulus of classroom activity, each correspondence student needs to be encouraged to develop his own enthusiasm. He should be told that what the instructor wants is not just facts but a live, interesting, personal contribution.

You might, for instance, ask students to submit questions for which they cannot find adequate answers in the text or other study materials. Remind them that it is a sign of intelligence and interest to ask such questions; it is a still better sign to make some contribution toward the answer. Perhaps such questions and tentative answers should be a part of every lesson report to be submitted.

Variety in the type of assignment is desirable. You may want to use a combination of essay, objective questions, and narrative problems. A report on an interview, simple experiments, a one page summary and reaction to the reading assignments, a business-type report, a "what if" type of question (What if the South had won the Civil War?), an analysis of opposing points of view--all these and others are interesting possibilities.

Here is a specific instance in which a "reaction assignment" might fit: In a course in the humanities you may want to require students to read certain documents. It may not be important to have them report on the contents of the document. Perhaps instead they should report on the significance of the document and their personal reaction to it.

Some of our courses emphasize problems for which a wide variety of answers are acceptable. (Follow at least some of the basic principles and have due regard for facts, but think up answers which management hasn't thought of yet!) In many courses it may be appropriate to ask a student to assume several different roles in turn and answer the question from each point of view.

In many cases a student should be told to reflect on what he has read and experienced (both before taking the course and during it), to express a personal point of view and to defend that viewpoint. (Later, the instructor will enjoy commenting on that viewpoint. Thus begins an exchange of ideas which makes correspondence instruction worthwhile to both teacher and student.)

If objective type questions (true-false, multiple choice, completion, matching, etc.) are used, the questions should require reasoning and not merely recall of facts. Objective questions are an effective way of covering considerable material quickly, but they should not be considered merely a short cut for the instructor.

It is difficult to construct thought-provoking true-false questions. Perhaps some variations of the usual true-false question will be effective. (Instead of the two extremes only--true-false--a third and/or fourth alternative -- usually true, usually false -- may be useful in non-exact subject fields. In an exact science such as mathematics, it may be helpful to use always true, sometimes true, and never true instead of true-false.

You may want to use true-false statements with space for added comments. In the additional short comment (perhaps one or two sentences) the examinee is expected to either illustrate the truth of a true statement or to make a meaningful correction of a false statement. (This calls for thought. The written comment often reveals that the writer did not know what he was doing when he marked the true-false statement, even if he got it correct!)

In multiple choice questions it is a good idea to have four choices. One choice will be obviously incorrect to most student; another choice is less obviously incorrect. Of the remaining two choices, one is the correct answer, but the other is close enough to it to suggest the need for thoughtful discrimination in reaching a decision.

In a well-constructed completion test there should be only one word or phrase, or only a few words or phrases, which are acceptable. The desired answer(s) should be both specific and significant rather than vague generalities.

In a matching test the two columns of elements to be matched should be of unequal length. There should be only one correct way to match the pairs. Matching authors with their works is a good example of a matching test.

Don't ask questions which require only a "yes" or "no" answer. Essay questions are often the best kind because they require thought, organization, and an ability to communicate. Certain key words and phrases are frequently found in good essay questions. Some of these key words and phraes are:

discuss fully (or briefly)	analyze
evaluate	give examples of
compare	classify
attack, defend	give reasons
under what circumstances	summarize
contrast	restate in your own words
explain why	organize
in what new ways	assume
what are the relative merits	interpret
criticize	

To sum up, is each lesson report a challenging experience for both instructor and student? Have you emphasized the how and the why and not merely the what? Have you made it difficult for the student to achieve the end result without demonstrating his whole reasoning process? Have you demanded the separate steps to a conclusion and insisted on logical and creative methods even if the final answer must be imperfect? If so, you're really teaching by correspondence!

WAYS TO PREPARE STUDENTS FOR THE SUPERVISED FINAL EXAMINATION

Before deciding how to help students prepare for a final examination, we need to know what kind of a final examination will be given. Here are the specifics: the examination must be supervised and given under classroom conditions; it must require at least two hours of work by the thoughtful student (but allow three hours since correspondence students usually do not work under a time schedule); and the examination must be reasonably comprehensive in nature, covering the essentials of the entire course.

Such examinations are required in all high school or college credit courses; the importance of the examination may be seen from the fact that the examination counts 50 percent of the final grade. Examinations are usually not given at the ends of parts of a course. An exception is made in the case of a student who has earned credit for one semester of work and has been granted permission to enroll for the second semester's work.

Perhaps the question students most often ask before an examination is this, "What kind of an examination should I expect?" Surely, this is a fair question, particularly in a correspondence course in which there is no supervised examination until the end of the course.

A brief description of the type of examination required would seem to be in order. What would you tell your students about the examination if you were teaching a class? Give the same kind of information here insofar as possible.

A pre-test or "dry run" examination <u>which</u> <u>doesn't</u> <u>count</u> toward the final grade might be in order, especially if a variety of material is covered (as in courses covering both grammar and literature). This pre-test may or may not be submitted to the instructor. Another suggestion is to include a sample examination (one which will <u>not</u> be used) and perhaps even include model answers (or suggests <u>where</u> and <u>how</u> the answers might best be found).

In general, preparing the lessons should be practice in preparing for the final supervised examination. But if a different type of examination is to be given, explain what will be expected of the student.

A study guide author who will teach the course may want to develop the final examination at the same time the course is written. (A separate fee is paid for devising the examination.) In that case it will not be difficult to make appropriate remarks to guide the student in preparing for the examination.

If the course is new, on the other hand, and particularly if study guide author and instructor are two different people, it may be well to postpone the construction of the final examination until some evidence of student experience with the course can be gathered. It would not be amiss, however, for the author to make some suggestions to the instructor privately.

Authors of study guides might consider the use of standardized cooperative tests available in standard high school and college subjects to test on knowledge and comprehension. Such tests are available from the Cooperative Test Division, Educational Testing Service, Princeton, New Jersey. Norms have been established for grade levels, high school through college.

Similarly, if you are writing a study guide for a college preparatory subject, you should consider the knowledge requirements of the College Entrance Examination Board, Princeton, New Jersey. Have the essentials been emphasized throughout the course and in the final examination so that each student has been adequately provided with valid preparation for the College Board Examinations?

Ideally, the supervised final examination should be a learning experience as well as a measure of achievement. Has the student been required to organize material, utilize skills, think through a situation, or create something new rather than merely repeat what has been given him? If so, his examination will be both worthwhile and memorable. Help our students to grow -- even in the final examination!

APPENDIX

How to Study a Correspondence Course - Table of Contents and page 1.
All students receive a copy of this manual.

Application for Supervised Examination
This application is sent with the course materials for high school and college credit courses. It is also used in those non-credit courses which have final examinations.

Cover Page for Gregg Shorthand, Part 1.
This is a typical cover page. The required texts are shown on the cover so that the shipping clerk will be able to match up texts and study guide easily.

Introduction for English for Everyone
This is one way to do it. Note that the Introduction not only gives specific, detailed advice about studying the course but sets the tone of the course and gives promise of fun and hard work.

Examples of Study Notes or Discussion Material
English IX. Assignment 14, pages 13 and 14.
The entire discussion material for Assignment 14 occupies 5 pages. In this excerpt the study guide author has introduced difficult material (Romeo and Juliet) by discussing first its similarity to the popular West Side Story.

American History. Assignment 23, pages 76 and 77.
Here is a dramatic presentation of both a point of view (an analysis of the post-war period) and an historical incident. Note also the effective characterization of Joseph McCarthy.

Real Estate Brokers' Preparation. Assignment 8, pages 38 and 39.
Are you interested in a vivid, detailed and realistic picture of the activities of the owner and a broker in selling a house? The writer obviously speaks from experience.

French I, Part 1. Excerpts from the Introduction.
An appreciation of the French culture is gained as one studies the language, but a tasty prelude should whet the appetite. Our introduction is designed to help each student to answer his own question: "Why study French?" Notes are given on geography, cultural landmarks, French writers and scientists, history, and the derivation of the language.

Bookkeeping. Assignment 20, pages 22 and 23.
The study guide combines business information not found in the text with an explanation of bookkeeping techniques. It not only provides breadth and depth but a convenient overview of the lesson.

Gregg Shorthand. Assignment 11, page 46.

The entire study guide is written in narrative form. Debbie and Tom (the characters in the story) are really assistant instructors who, through their discussions as they study together, help to clarify points and emphasize details. The course is so organized that the learner hears each sound on a record at standard rates of dictation, sees the characters in the paperback text, and writes the characters in his lesson reports to be submitted for correction.

Everyday Arithmetic. Assignment 10, pages 44 and 51.

The Real Numbers Game is used to motivate and to develop skill in forming and solving elementary equations. Page 51 is the conclusion of "The Great Art Robbery". The simple calculations in this story provide a review of the essentials of the course.

Basic Radio. Excerpts from Assignments 2, 8 and 13.

Here we have two examples of the effective use of analogies or word pictures to make technical information understandable. The fishnet and the dancing ducks make their points more effectively than would purely technical explanations. The megaphone explanation is not dramatic, but it is a model of simplicity.

Chemistry. An excerpt from Assignment 6.

In this excerpt a chemical reaction is first described in words, then translated into a chemical equation. The step-by-step development of the equation is clearly shown.

Biology. An excerpt from Assignment 1.

This explanation forces a student to really study the diagram on page 7. The study guide explains the diagram, but it also asks questions to see if the material is understood. The questions raised are part of the lesson report to be submitted for correction. Analogy is used effectively in the case of mirror images. The point is reinforced by the self-demonstration ear experiment.

Excerpts from Lesson Reports

To provide a more comprehensive view of the lesson report, we have selected questions from the lesson reports of several different courses. Each question is distinctive in some way.

A good question must be interesting, challenging, thought-provoking. It will encourage, or even demand, sound reasoning. It may also be motivating because it is somewhat personal or even a bit humorous.

THE COMMONWEALTH OF MASSACHUSETTS
Department of Education
Bureau of Adult Education and Extended Services

HOW TO STUDY A CORRESPONDENCE COURSE

A. Studying and Preparing Lesson Reports

Getting ready to study 1
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What equipment will you need? 2
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Concentrating on your studies 4
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What you need to memorize 6
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HOW TO STUDY A CORRESPONDENCE COURSE

A. Studying and Preparing Lesson Reports

Getting Ready to Study

Do you know how most adults learn? Do you know your own learning strengths and weaknesses? This manual shows you how to learn by making the most of your strengths and overcoming your weaknesses.

Let's begin by looking at some facts about how adults learn. Age doesn't have very much to do with learning. You have forgotten many details that you learned many years ago but you have generalized much of the information that you have acquired over the years. Your intelligence is as good as ever, perhaps even a bit better. You can still memorize effectively.

But you have at least two important advantages over the young person in school. In the first place, you have learned a great deal by living. Much of the information in a government course can be picked up through years of newspaper reading. You already know much about life which is related to what you will study. You have a viewpoint from high up on the mountain rather than from the valley.

Secondly, you have stronger reasons for learning as compared with young people. You know a great deal about your needs; you realize why certain information and skills are important to you. You can see how what you are learning fits in with what you already know. If you are a bookkeeper, for example, you have a personal interest in learning something about accounting.

But why do many adults fail to continue their education successfully? There are several reasons:

-- They don't plan for success. This involves self-discipline, using strengths and overcoming weaknesses.

-- They don't have realistic goals. There should be a distant goal and lesser goals along the way.

-- They lack a positive attitude. Unless you think you can do it, you can't do it. You need not feel embarrassed about lack of knowledge. In a correspondence course you are in a "class by yourself" and no one else sees your shortcomings.

-- Some people don't learn because they resist all change. Learning is growth. An idea which was good enough for a youngster, or good enough years ago, isn't geared to adult thinking in our times.

The Commonwealth of Massachusetts
Department of Education
Bureau of Adult Education & Extended Services

APPLICATION FOR SUPERVISED EXAMINATION – CORRESPONDENCE COURSE

The supervised final examination is an essential part of every correspondence course offered for credit. Our credits are recognized because our students prove their ability in the same way that class students do – by taking a supervised final examination.

No credit can be awarded for the completion of a correspondence course unless the student has a passing or better lesson average and at least a passing grade in the final examination. The lesson average and the examination grade count equally in determining the final grade.

A certificate will be awarded automatically for each course completed with **both** a passing or better lesson average and a passing or better examination grade. **See below for information about transcripts.**

Supervised examinations are given on a regular schedule at the **Bureau of Adult Education & Extended Services.** Examinations may also be supervised by any public school official at his convenience, provided the student makes arrangements in advance. Students in the Armed Forces may similarly take examinations under the supervision of an officer.

Please complete and submit this application when you have finished the **third lesson from the end** of the course (for example, lesson 22 in a course with 24 lessons.)

To the Supervisor of Correspondence Instruction:

A. Kindly arrange for the supervision of my examination in

Name of Course: _____

Signed: (Name of Student and Address) _____

_____

(1) I have arranged with _____, Official Position
(Name)

_____
(Address)

for the supervision of my examination at his office, on _____
(Date)

(2) I request that my examination be given at the Department of Education. If you request the latter, indicate here with a cross: _____.

Approximate date examination desired, _____

The following examination schedule is now in effect ~~at this office~~: ~~TUESDAYS AND THURSDAYS, 9 A.M. – 9 P.M.~~

B. Kindly submit a transcript of my credits for this course to the name and address indicated below:

Name and title of individual _____

Name of college or other organization _____

Address _____

_____

One transcript is provided free. Additional transcripts may be obtained on payment of one dollar each.

P lease return this ENTIRE PAGE when requesting an examination or transcript. Thank You!

MASSACHUSETTS DEPARTMENT OF EDUCATION
Bureau of Adult Education and Extended Services
182 Tremont Street
Boston, Massachusetts 02111

Study Guide

for

Correspondence Course

in

GREGG SHORTHAND, Part 1
Assignments 1 through 15

One high school unit for the
successful completion of 30
assignments and a supervised
final examination.

Study Guide
written by

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Sybil P. Smith, Editor
Bureau of Adult Education

Required Texts:

Leslie, Zoubeck & Boer, Gregg Shorthand 1 Text-kit
Diamond Jubilee Edition (1965)
Gregg Division, McGraw-Hill Book Co., New York

(See page 1 for list of contents of kit.)

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May 1968

INTRODUCTION

Constructing a means of communication, such as a language, is like building a dwelling place. Your thoughts live in this dwelling place. If your House of English is not well-built, it is hard for you to organize your thoughts and to express them clearly.

In order to say what you mean as you speak and write, it is necessary to build a strong, roomy House of English where your thoughts will not be cramped or confused. It may be necessary for you to break down old partitions or bad habits, which are barriers to clear thought and expression, and to set up new structures of good grammar. If you do this, you will be able to talk with teachers, doctors, lawyers, your clientele and your friends and find that you are getting your points across, not just listening to theirs.

You must remember, as you study, that you are building for yourself a larger, more efficient means of communicating your ideas to everyone with whom you come in contact.

When you have finished this course, you should be able to speak and write clear sentences by using the correct form of words, correct capitalization, punctuation and spelling. Clear sentences involve knowledge of the eight parts of speech and their correct usage, recognition and avoidance of slang, and the ability to arrange words so that they make sense to everyone. After you have developed the art of clear sentences, you will be able to organize them into paragraphs, letters, and long compositions.

People judge others not only by what they say, but also by the way they say it. Speaking and writing clearly is an art which involves hard work. No one who expresses himself well does so without having studied. You are about to begin a course of study which demands hard work, but the end result is well worth your time.

The rewards you will receive depend directly upon the amount of time and effort which you are willing to spend.

SUGGESTIONS FOR STUDY

1. Choose a special time in your schedule which you feel able to devote to correspondence work. Make sure that this time is not while you are watching television or listening to distracting radio programs or phonograph records. Try to find a place where you can be quiet and, if possible, alone.

2. Make this time a part of your regular plans. Don't allow yourself to forget or put off your correspondence work. Develop and use your will power.

Assignment 14

Reading Requirement: Adventures in Reading

pages 425 - 426 William Shakespeare.

pages 431 - 432 Shakespeare's Theater

page 433 Shakespeare as Playwright

pages 434 - 510 Romeo and Juliet (Read through quickly for enjoyment. The play will be studied in detail later)

Before studying Shakespeare's play, let's take a look at a recent Broadway and Hollywood success: Leonard Bernstein's West Side Story.

Though separated by over 360 years (Romeo and Juliet was written in 1594: West Side Story in 1957), these two plays about "star-crossed lovers" resemble each other in many respects. To begin with, Shakespeare's feuding houses of old Verona are paralleled by the rival gangs of West Side New York.

Both plays open with fighting in the streets by lesser members of the cast. Prince Escalus and his officers break up the sixteenth century fight; in West Side Story, Officers Krupke and Schrank perform that function. The atmosphere of both plays is that of violence and hate. The rivals in both plays are vigorous and hot-blooded.

Romeo is lovesick over Rosaline; Tony in West Side is searching for love. Both are ready for a deep love.

Juliet has her mother and a nurse; Maria, the heroine of the musical, has a close friend, Anita. Both Juliet and Maria are more or less engaged to an acceptable young man before the action begins.

Maria, although older than Juliet's fourteen, is younger and more innocent than the other girls with whom the gang members associate. She lives in a grown-up world, however. Unlike the earlier play in which the parents have an important role, West Side Story has little to say about the parents. The Sharks and the Jets have only their own generation; their alienation from the older generation is part of the tragedy.

Replacing the masked ball is the settlement house dance at which Polack and Puerto Rican face each other across a crowded room. Again, as in the earlier play, it is love at first sight. Maria and Tony touch each other and kiss.

The stylish balcony scene is replaced by a fire escape scene, effective for the time and place of the story. Shakespeare's great love poetry gives way to the tuneful musical score of Leonard Bernstein.

Killing and counter-killing by rival gang members follows the earlier pattern. Tony, having killed Maria's brother in revenge, becomes a fugitive from justice. He plans to escape town with Maria who meanwhile hides in Doc's drug store to await him.

Here there are significant departures from the original script. The religious influence of Friar Lawrence is missing; Doc is hardly adequate in that role. Chance brought about the final disaster in Shakespeare's play; in West Side Story, Anita deliberately spreads the lie about Maria's death. Clearly social prejudice, mutual suspicion and hate not only motivate the gang warfare but lead to the final inevitable disaster.

West Side ends in a manner more believable to modern audiences. Tony believes the lie that Chino (her former suitor) has murdered Maria. He shouts defiantly "Come and get me, too" for he is unwilling to live without Maria. In the end Chino shoots him as an act of revenge.

But as the curtain falls Chino and Maria are still alive. Unlike Juliet who commits suicide when she finds her lover dead, Maria cries out "We all killed him," emphasizing the social message of the musical.

Romeo and Juliet lives on as the tragedy of two young lovers who cared more about love than life itself. West Side Story is the tragedy of poverty-stricken, first generation Americans and alien Porto Ricans seeking a foothold. The death of Tony is a detail, rather than a central point, in the total tragedy.*

Romeo and Juliet will still be performed a hundred years and more from now. But will West Side Story still be effective once the social problem at its core has been removed?

Perhaps so. The social problems which Charles Dickens unmasks in his novels are no longer present in England, but his prose is still read and appreciated throughout the world.

Do Shakespeare's plays lend themselves to modern dress? Both Julius Caesar and Hamlet have been played in business suits. Perhaps this is not a radical departure when we consider that Shakespeare dressed his actors in Elizabethean costumes rather than, for example, ancient Roman togas in the case of Caesar.

* The comparison between the two plays is based on notes by Professor Norris Houghton in the Dell paperback Romeo and Juliet: West Side Story, (1965)

ASSIGNMENT 23

McCarthyism and the Post-War World

Study Requirement: Todd and Curti, chapters 40 and 41.

Reading Assignment:

Arnof: "Shift to Peace," page 467.
"The TV Debates," page 479.
"Marshall's Plan," page 483.
"The Communist Stage Setting," page 488.

INSTRUCTOR'S MESSAGE

"Boys, if you ever pray, pray for me now," said Harry Truman to the reporters when he succeeded to Franklin Roosevelt's unexpired term of office in 1945. The plucky little ex-Senator from Missouri faced a problem-riddled post-war world that would have daunted a far more experienced man. But Truman was never one to duck problems. "The buck ends here," read a sign on his desk.

What to do about a divided Germany? the control of nuclear weapons? the future of the United Nations? the growing power of Soviet Russia? Those were the big headaches. The lesser ones, none the less painful, had to do with demobilizing the armed forces, inflation, and strikes, strikes, strikes.

The road back to peace was a bumpy one; but at least it didn't run downhill. Fears about depression proved groundless. The pent-up demands of millions of Americans made prosperous by war-industries jobs created a boom market for consumer goods. But until the munitions plant could be converted into a mattress factory, scarcity prevailed. And with scarcity came soaring prices. Meanwhile Congress, representing an electorate impatient of restraints and shortages, swept away almost all war-time price controls. The result was inflation. And the result of inflation was labor unrest, as the workman demanded his cut in the peacetime pie of plenty.

The demand took for form of a rash of strikes. The strikes resulted in a political reaction, which in turn resulted in a Republican majority in Congress. And the end-product in this chain of cause and effect was the Taft-Hartley Act, which was passed over Truman's veto.

But the swing-back to conservatism was a short-lived one. Americans were unwilling to allow the reforms of the New Deal and the liberalizing changes wrought by the war to slip down the drain. Thus in 1948, they re-elected Harry Truman president in the greatest upset in American political history. He took the election as a mandate and determined to go the New Deal one better with the Fair Deal. The Fair Deal, however, was in for stormy weather. First, it was buffeted by an obdurate Congress and then it was all but wrecked by Joe McCarthy. McCarthy's nightmarish career was one of the biggest news stories of the early 1950's, but his career only amounts to a short shameful footnote in the history of the nation.

Republican McCarthy, junior senator from Wisconsin and practically unknown, was looking for a sure-fire cause to bring himself into the public eye. He systematically chose Communism as the issue most likely to succeed. America was ripe once again for another Red Scare.

As Henry Steele Commager, Pulitzer-prize-winning historian and Professor at Amherst College, described him, McCarthy was "a finished demagogue--brutal, unscrupulous, cunning and adroit." His method? "Wild charges, fake evidence, innuendoes," reported a Subcommittee of the Senate Foreign Relations Committee which investigated the McCarthy charges, "the most nefarious campaign of truths and half-truths in the history of the republic."

McCarthy made his first splash by alleging in a speech that he held in his hand the names of 205 "card-carrying Communists in the State Department." He never produced a single name. Senatorial immunity allowed him to speak without legal penalty. His smears and slanders grew outrageous; he even accused Eisenhower and General George Marshall (then Secretary of Defense) of being Communist sympathizers. He launched broadsides against ambassadors, editors, distinguished professors and public servants, and even fellow-senators of the highest integrity.

Even though his charges were largely unfounded and almost totally unproved, his activities weakened the Democratic party and contributed to its defeat at the polls in the presidential election of 1952. But the presence of Eisenhower in the White House and the influx of Republicans to Congress failed to deter the senator. As Chairman of the Senate Committee on Government Operations and as Chairman of the Permanent Subcommittee on Investigations, he stepped up his campaign. He charged "appalling infiltration" and "subversion" in the State Department's overseas information program; he attacked Eisenhower's new Ambassador to Russia because he had been present at Yalta; he charged that the Army Signal Corps at Fort Monmouth was riddled with subversion; and finally he tangled with Robert Stevens, Secretary of the Army over a trivial matter of an honorable discharge for an Army dentist whom he had revealed as a Communist sympathizer.

ASSIGNMENT 8

Brokerage; The Broker's Papers; The Broker as Businessman

Study Requirement: Text, pp. 16, 19-22 inclusive; 50-57 inclusive.

Having at least introduced important aspects of real estate laws and pertinent aspects of real estate transactions, we shall now describe how the broker actually operates. We shall illustrate our discussion with an example of a typical real estate transaction, giving enough variations to highlight most of the relevant points.

A broker is asked to list a two-family house for sale. He appears at the house and meets the seller. Together they tour the house. The broker asks about an eight-foot framed mural of "Custer's Last Stand" mounted on the wall over the fireplace and learns that it is to become one of his selling points for the house; the seller does not wish to take it with him to his new home.

The owner tells him that the tenant upstairs has a 10-year written lease, which has just been extended for another 10 years. The broker makes a note to check the Registry of Deeds to see whether notice of the lease is on file.

The seller states that several other brokers have taken the listing on the property before him, so there is no chance for the broker to have an "exclusive" listing. An exclusive is just what the name implies: the broker is named the sole agent for the property for a fixed period, usually from one to three months. To be binding, an exclusive agency contract must be supported by consideration, though the consideration need not be money. Sometimes the contract is made under seal, and sometimes it is made in consideration of the broker's promise to make "all reasonable efforts" to sell the property during the term of the agency. If the broker has been able to get an exclusive "right to sell," (which is more exclusive than the exclusive agency) it means that he is entitled to a commission if the house is sold during the period of the contract, even if he was not himself directly responsible for selling it. The owner of the house cannot even sell it himself without being liable to the broker for the commission!

In an "open listing," which is the kind this broker received, the seller places his property with as many brokers as he wishes. He is free to revoke any or all of these listings, or to sell the house himself, whenever he likes, since he has no actual contract; he has simply made an offer, which he may withdraw at any time before someone accepts it.

The broker next asks the seller the price he wants for the house, including the broker's commission. The seller may say that

he wants to net $40,000. This means that he wants to realize that amount after all fees and commissions have been deducted. The broker then adjusts the selling price by computing his commission and adding it to the seller's desired net price. This new figure is the price the agent will quote to prospective buyers.

The seller states that there is no mortgage on the property, and the broker notes that he should arrange financing with a bank immediately. (If there had been a mortgage, the broker would probably have found it easy to arrange financing through the same bank and would thus have started there.)

The broker now departs and goes to the Registry of Deeds, not only to check on whether the notice of the lease is recorded, but also to examine the record of the last sale of the property. Preparing the abstract of title is a job for a lawyer, but the broker may look at the last deed registration and see for what price the house was sold. This knowledge and the impressions he gained from having actually visited the house allows him enthusiastically to recommend the property to the bank. If it is the local custom, the bank may, on his request, agree to give him a small commission, one percent, on the mortgage amount if they handle the financing. This is an oral contract between bank and broker alone. It in no way conflicts with his obligation to the seller. This is called a mortgage "finders fee."

The broker now advertises the property and eventually finds a customer. If possible, both the seller and the buyer should be present when the broker shows the house. The broker will then have no trouble proving that he was the one who interested the buyer in the house. Let us assume that a prospective buyer appears, but the seller is not able to be at the house that day. The buyer is interested and offers to pay $35,000 for the house. Clearly, this does not meet the seller's terms and therefore does not discharge the broker's agency, but the broker replies that he will take the offer to the seller if the buyer will make it in writing and will make a nominal deposit of $500. The broker takes the buyer's check and gives him a receipt, which is actually an offer form, with all the elements of a good real estate contract. It describes the property b reference and carries the signatures of both the buyer and the agent. It also names the price offered for the house.

The agent takes this check to the bank and has it certified. He then shows the offer to his principal. If the seller accepts it by signing it, we have a full, binding contract, which contains both offer and acceptance and names the consideration.

In this example, the seller accepts the offer. At this point the broker has fulfilled his obligations as the seller's agent and is entitled to his commission, based, of course, on the new price. He then fills out a purchase and sales agreement, which is nearly the same as the offer form, except that all pertinent information is included. This agreement states that the house is sold with a lease on the upstairs apartment; that "Custer's Last Stand" will remain over the mantel, but that a cast-cement sundial and a

French I, Part 1. Excerpts from the Introduction.

The new 7 mile road tunnel under Mount Blanc (longest of its kind in the world) on the direct route between France and Italy cuts the driving distance from Paris to Rome by 125 miles. Let's go!

France is largely agricultural. There are a few large landholdings, but most farmers have less than 25 acres and most vineyards are no larger than 5 acres.

Wheat is the chief farm crop and most of it goes into French bread. The idea of eating corn seems strange to the Frenchman so he feeds ears of corn to his cattle and eats frog's legs himself.

France is famous for its many wines, its cheeses, its perfumes, fashionable clothing (la haute couture) and other luxury products. Dressmaking in France is a profession for which mothers train their daughters with great pride.

With World War I Paris, the city of light, became a great industrial center, but it remained a city of history and beauty, a center of art and culture. There is an old French saying: Everyone has two cities - his own and Paris.

Famous landmarks abound in Paris. You have doubtless heard of Avenue de Champs-Elysees, Arc de Triomphe, Jardin des Tuileries, Le Musee du Louvre, Place de la Concorde (the enormous square where Cleopatra's Needle, an Egyptian obelisk, is located), Place de la Bastille (near which the people stormed the state prison in 1789), The Seine with its left bank, (the university and art shops), and right bank (fashionable shops and night life, La Tour Eiffel), L'Opera, Notre Dame de Paris, the Bohemian night life at Montmartre, and the fast-moving Metro (subway).

French writers, past and present, are known throughout the world. Voltaire and Rousseau, among others, offered intellectual challenges which sparked the French Revolution. In the 19th century Balzac was hailed as perhaps the greatest French novelist up to that time. His contemporaries, Victor Hugo and Alexandre Dumas were also famous - Hugo chiefly as a poet and playwright and Dumas as an historical novelist. Zola was a widely-discussed novelist; his J'accuse was largely responsible for the eventual freeing of the unfortunate Captain Dreyfus who had been falsely condemned to Devil's Island.

Anatole France, a leading writer of the early twentieth century, was noted for his irony and exquisite style; Guy de Maupassant was France's greatest master of the short story and Jules Verne, world-famous for his science fiction, foretold, with amazing accuracy, the submarine and trips to the moon. In our times the leading French writers include Sacha Guitry, noted for sparkling comedy, and Albert Camus, a novelist with themes of theological and social significance.

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French I, Part 1. Excerpts from the Introduction.(continued)

The French Revolution (1789-1800) is one of the great events of world history. Liberty, equality, and fraternity replaced royalty, but not without sending thousands of innocent clergy and commoners to the guillotine. Later came the Napoleonic conquest and decline.

Since then France's history has been a stormy one, punctuated by a succession of regimes. The country was overrun by the Germans in World War I and again in World War II. After World War II, emphasis was on rebuilding a shattered economy, regaining markets, and a place of national pride and of cultural leadership. Thanks to the Marshall plan, recovery was swift and France again became a world power.

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Today French is spoken by more than 70 million people in France, the former French Colonies, parts of Belgium, Switzerland and Canada. It is the language of diplomacy and is commonly used, along with English, in international affairs. Educated people in many countries use French, to some extent at least, as a second language.

As pointed out in your text, many words have long been spelled the same way, or nearly the same way, in both French and English. The Academy continues to protect the language - a protection not available officially to the languages of most countries. Meanwhile, rapid transportation and the increased mingling of nationals for business and pleasure have brought about changes which shock both purists and nationalists. The younger generation of France, for example, welcomes not only the phrase but the institution it represents - "le drug store".

Other serious investors are interested in long term goals such as a college education for children now in the elementary grades or a sizeable income for the retirement years. Such investors are interested primarily in the so-called growth stocks. These companies may now be paying rather modest dividends because they are plowing most of their earnings back into the business. Utilities, chemicals, communications are typical fields which seemed destined to have tremendous growth in the future. An investment may double or triple itself in value in a ten or fifteen year period. There is no guarantee of success, but careful money management ususally pays off well.

Corporations may have widely diversified ownership but they are not democratic by nature. Certain broad policy decisions must be made by the stockholders, but usually the viewpoint of a successful management prevails. Most stockholders vote by proxy, i.e. they mail their ballots in advance; only a few stockholders attend the corporation meetings. Thus management knows before the meeting opens how many votes it controls.

Contrary to democratic practice, those with the most money have the most votes. Usually each share, rather than each shareholder, is entitled to one vote. A proposal by management is practically assured of victory unless a rival faction organizes enough stockholders in advance to control more than half of the shares voting. This sometimes happens when a group with limited ownership tries to gain control of the company. Another way to gain control is to purchase large amounts of stock, but this procedure is expensive and there may not be enough stock available on the market. It is said of some of the largest corporations that no one person or organization owns more than 1% of the total stock.

The stockholders of record as of a certain date (remember that the ownership of large corporations is undergoing constant change) elect the directors who serve continuously, although usually on a part-time basis unless they are also officers of the corporation. The active management of the corporation is conducted by the officers and hired managers.

You will notice that there is a considerable gap between the people who own the corporation and provide the investment and those who run it on a day-to-day basis. As you might expect, there is apt to be a difference in the attitude of the manager who owns the entire business or a large share of it (proprietorship or partnership) and the manager who is an employee of absentee owners. The arrangement does permit the hiring of expert management talent, but the personal relationship and interest of other forms of organization may be lacking.

But the picture is not one-sided. The hired executives realize that much of the success of the corporation depends on their own efforts. As the corporation succeeds they succeed. Furthermore, executives are encouraged to become stockholders so that they may profit as owners as well as gain salary increases and bonuses for successful management.

Often they are permitted to purchase the corporation's stock at prices under the average market price. This privilege is sometimes extended to all employees and is believed to contribute to good morale and increased productivity.

The board of directors decides when profits will be distributed and in what amount. The directors are not obligated to distribute profits if they think that it is in the best interests of the business to omit the dividend. Usually part of the profit for a period is retained in the business to increase the Surplus account and part becomes Dividends Payable. Although dividends may also be paid in additional shares of stock, we are concerned in this course with the more common practice of paying dividends in cash.

Learn the distinction between the various net worth accounts. Capital Stock shows the amount of the investment. Surplus shows the undistributed earnings (i.e. total earnings less dividends paid) of past years. Profit and Loss shows the earnings of the latest year completed.

Follow the transactions through the T accounts shown on page 418. When the corporation was organized with an original investment of $10,000, the corporation (the artificial being) received $10,000 in cash (debit Cash) and issued to the owners stock certificates representing the $10,000 investment (credit Capital Stock).

The business is successful and earns a profit of $1,000. Income has exceeded outgo by this amount. The Profit and Loss account for the period is closed into the Surplus account (debit Profit and Loss; credit Surplus). This is done in order to facilitate the distribution of profits.

The directors now decide to retain 40% of the surplus and distribute 60% of it to the stockholders or owners. This is done easily by declaring a dividend of $6.00 per share. ($600 divided by 100 shares equals $6.00 per share.) This reduces the Surplus account by $600 (debit Surplus) as this amount is transferred to the Dividends Payable account (credit Dividends Payable). Notice that Dividends Payable is now a liability of the business and is shown as such in the Balance Sheet.

The final double entry is made when the dividend checks are mailed to the stockholders. The Dividends Payable account is closed by a $600 debit to Dividends Payable and Cash is reduced by $600 (credit Cash).

The $400 credit balance remaining in the Surplus account is undistributed profit. This balance plus the $10,000 original investment represents the Net Worth of the corporation or the excess of its assets over its liabilities.

ASSIGNMENT (SECTION) 11

INTRODUCTION

"You know Deb, it's a funny thing; I am suddenly beginning to understand much more clearly the rules of grammar, punctuation, and spelling, just because they are stressed in the process of learning shorthand. I never worked very hard on these things in school; they didn't seem so important, but now they fit into a larger picture quite well!"

"I never had trouble with grammar in school", she replied, "but I'm learning a lot about business procedures and the writing of business letters. I really knew nothing about these things before now. It's all a matter of experience, I guess, and this is a good one!"

"Well, let's get started!"

SECTION 11 - STUDY REQUIREMENT

The introductory sentence at the top of Page 50 indicates that you all are going to learn a variety of things in this Section. You note that Par. 80 is another group of Brief Forms. Before you tackle the new ones, however, you will want to review the ones that you have already learned, for you and Tom and Debbie realize that absolute and complete mastery of the Brief Forms is essential if you are to have good skills in shorthand. You turn back, therefore, to Page 20, Par. 26, and read and write the list of Brief Forms 3 times. You do the same thing with the Brief Forms on Page 38, Par. 58, and on Page 42, Par. 64.

When you all have finished this review, you are ready for Par. 80, Page 50. You read aloud, trace, and then write this new list of Brief Forms 3 times. The Quick Check also gives you an additional opportunity to master the new Brief Forms.

"Debbie, I would like to rewrite Par. 80," commented Tom. "I really need to work on proportion. The shorthand for 'and' 'they' and 'them' caused me a little trouble even though I have written them a number of times."

"OK, Tom" replied Debbie. "I could profit by additional practice, too."

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WHAT TO DO IN THIS ASSIGNMENT

Real Numbers Game: The printed rules for the REAL Numbers Game (included with the set of five colored cubes) describe a game which is more difficult than the game we are about to play. Our own simple numbers game is one which you can play when you are alone. Then, when you are good at it, you can compete with others.

Here are the directions and here is what happened when we played the game in the office one day.

Simple Numbers Game

1. Throw the five colored cubes. Continue to throw them until you get at least three different numbers and at least one of these: +, -, ÷, x. (We threw the cubes and these numbers and signs came up on top: 1, 5, 7, + and -.)

2. Now, in two minutes, list as many numbers and equations as you can. Be sure to solve the equations. (Below are the first 25 that we wrote down. Note that you can rearrange the numbers in different ways to make new numbers. There are also many possible equations. You provide the equal sign and the answer to the equations--they are not on the cubes.)

Possible solutions:

1	75	5 - 1 = 4	71 + 5 = 76
5	175	7 - 5 = 2	17 - 5 = 12
7	157	7 - 1 = 6	
15	715	7 + 1 = 8	
51	751	5 + 1 = 6	
17	571	7 + 1 - 5 = 3	
71	517	15 + 7 = 22	
57		51 + 7 = 58	

3. Stop writing at the end of two minutes. How many did you get? With 5 good numbers and signs and a little practice, you should easily get 40 to 50 different numbers and equations in two minutes. Keep at it until you are good at it!

4. Send in your best game results as part of this assignment. (If you are pleased with the results, you'll probably want to play in competition now!)

Having fun? Now turn to the next page for the start of the true-to-life adventure story you will help write.

As soon as I reached the car, the radio, which was crackling, came to life and we heard Forbes' voice. Within a few minutes, Joe had given him the license number of the truck and a description of the men. The highway police of the Waco-Austin region could now take over. We returned to our hotel where you were waiting. You came running to the car in which we sat, listening to whatever reports were coming in. Within 15 minutes after our return, we heard Forbes' excited voice saying that the truck had been picked up as it was entering a western suburb of Austin. The men had been taken into custody, the third man was in the hideout--now surrounded by police, and the treasures were safely in the hands of the authorities. Our masquerade had worked.

Back in our home city, we reported to Ellison. You turned in your account book. The information was as follows:

Expenditures for first month (including art purchases): $_____[17] (Same as #16)

Expenditures of second month:

Hotel bill for suite and single room	$ 700.00
Food and supplies	1193.50
Total:	$_____[18]

The total for the two months was: $_____.[19] You found that we had $_____[20] to return to Ellison. You remarked that we had spend approximately _____[21] of the original sum.

The museum was very generous in its payment to us for the return of the stolen treasures. They gave Joe a bonus of a month's salary, plus 1/3 of the remaining money, making his final pay $_____.[22] You also received 1/3 of the remaining sum, equal to $_____.[23] To your surprise and delight they added to this the silver dish, which now rests in a place of honor in a locked glass cabinet in our living room.

Sorting out the things I had had to purchase in my guise as art dealer, the museum found that the early Flemish painting was a valuable one, which they subsequently added to their own collection. One or two other things were kept, but the remainder was sold to interested buyers in New York City. For my share in the proceedings, I received the final third of the remaining sum, plus $2,000.00, making $_____.[24] I shall probably never live as luxuriously again in my life as I did during these two interesting months, but then, I'm not at all sure that I want to. Do you?

A thought has just occurred to me, dear. Since you are really my ever-loving wife, we ought to split our fees equally, which means that we each end up with $_____[25] in good old American dollars. You'll remember to include both our incomes on our joint income tax return, of course. And now to relax!

Basic Radio, Part 1 Excerpts from Assignments 2, 8, and 13.

From Assignment 2

The radio receiving set has four essential parts: the antenna-ground system, the tuner, the detector, and the reproducer or speaker.

The antenna-ground system is like a fishnet. The tuner is an opening in the net which is varied in size, depending on the size of fish wanted (i.e. the broadcast frequency tuned to). As we open the net wider, we get the larger fish (the stations with the higher broadcast frequencies) and miraculously the tuner keeps out the smaller fish.

Now imagine that the detector is a device which quickly makes a quality decision about all the fish of a given size. It rejects what is not usable for our purposes and selects the fish that we need for fish steaks (i.e. the part of the signal which will operate a reproducer).

Now we process the fish or change it to the finished product to be marketed. This is done by the reproducer.

The reproducer's processing job is that of changing the electrical waves to sound waves so that we can hear them. Our hearing is dependent upon air pressure. As we speak, we move air in and out and our ears feel the differences in pressure. As electrical impulses activate the reproducer or speaker, the speaker fluctuates, causing changes in air pressure which we distinguish as different sounds.

From Assignment 8

The Edison effect or thermionic emission. Flo Ziegfeld, master showman and businessman, rented a booth at the World's Fair and set up a cage full of ducks. Under the cage he installed a hot plate. When the bottom of the cage was heated, the ducks would jump around; these were Flo Ziegfeld's dancing ducks.

This is just what happens when electrons are heated. They move to the surface of the material and literally dance along the surface. When a positive potential is put close to this heated material, the electrons jump to it. Other electrons take their place in a repeating action which results in a current flow called thermionic emission.

From Assignment 13

Have you ever wondered why your voice can be heard further when you use a megaphone? When you speak you are moving air in and out from your voice box. But your throat is relatively small in comparison to the area of air around you. As a result, most of the strength of your voice is lost. If we use a cone megaphone, then there is a gradual change from small megaphone opening near your mouth to the larger opening at the outer end. Your mouth can't provide a gradual transition in air space, but a megaphone can.

Chemistry. An excerpt from Assignment 6.

Have you ever seen the brilliant white light produced by a burning magnesium flare? These are used to mark disabled cars on the highway at night, to signal distress at sea, and for many other purposes that require a bright light that can be seen over long distances. Let's ask ourselves the question: what is the chemistry of a burning magnesium flare?

To answer this without the use of symbols, formulas, and equations, we would have to say the following: "As it burns, the magnesium in the flare combines with oxygen from the air to form a compound, magnesium oxide. In doing so, a great deal of energy is realeased in the form of heat and light." Now how would the chemist say the same thing in a much shorter way? The word equation for this reaction would be:

Magnesium + oxygen = magnesium oxide + energy.

The sign + should be read as plus and = as yields. Already we have shortened the statement considerably. Now let's write the equation in the chemist's shorthand using symbols. The symbol for magnesium is Mg and for oxygen is O. Furthermore, oxygen occurs as a diatomic (two-atom) molecule, O_2 , in the air. Now our equation becomes:

$$Mg + O_2 = \text{magnesium oxide} + \text{energy},$$

Now we must use our knowledge of ionic charges gained from the table on page 98 to discover the formula for magnesium oxide.

Remember this important rule called the Conservation of Charge. "The sum of the positive and negative charges occurring in the formula for a compound must always equal zero." The table lists magnesium as having a +2 charge while oxygen, as the oxide ion, has a -2 charge. Since +2 and -2 equals zero, this means that magnesium and oxygen combine in a 1:1 ratio and the formula for magnesium oxide is $Mg^{+2}O^{-2}$ or simply MgO.

Now our equation has become:

$$Mg + O_2 = MgO + \text{energy}.$$

The equation is still not complete because there are two atoms of oxygen on the reactants (left-hand) side of the equation and only one atom on the products (right-hand) side. This violates the Law of Conservation of Atoms which states: "Atoms must be conserved in a chemical reaction." Think of a chemical reaction in terms of a business ledger. In business the debit and credit sides of the ledger must balance to the penny. In a chemical reaction there must be the same number of each kind of atom on both the reactant side and product side. We can balance our chemical

ledger by saying that two MgO molecules are formed from a single O_2 molecule and that two Mg atoms are required for this process. Our equation would then read:

$$2Mg + O_2 = 2MgO + \text{energy.}$$

In this simple equation we have stated what takes place when a magnesium flare burns. In a later lesson on energy we will see how the chemist adds even more information by stating how much energy is obtained from the chemical reaction between magnesium and oxygen.

Biology. An excerpt from Assignment 1.

Look at the diagram on page 7. You will see that there are three sets of arrows. The black arrows represent requirements of the organism; the white arrows are processes that take place in the organism; the brownish gold arrows represent the products of the organism.

To see the relationships more clearly, follow the black arrow representing stimuli (plural of stimulus) from the external environment. When the stimuli enter the organism they can cause either secretion or motion. If you continue to follow this arrow, you will see that both secretion and motion cause a reaction called response which is outside the organism.

Now, return to the internal reaction to stimuli called secretion. Follow the alternate pathway and you will see that there is an additional reaction with the process called digestion. In turn, note that digestion is related to both circulation and excretion.

Follow the process of circulation in the organism and you will find it associated with assimilation, respiration, reproduction, and growth. You will note that the growth process is related to excretion. But look carefully at the internal pathways. Digestion is not solely a reaction to secretion.

Q4. What four additional functions or requirements are needed so that digestion will take place?

Q5. Where is oxygen needed and what are the results of oxygen going into an organism?

Q6. According to the diagram, what process appears to have the most interaction? Why is this process important to the survival of an organism?

Now notice how organisms are organized to carry out the process of metabolism. Mr. Weinberg introduces molecular shape and uses the diagram on page 11 to emphasize optical rotation. This fundamental concept is difficult to understand without the use of special equipment. But you possess some external features that we can use to indicate what is meant by optical properties.

Look at your hands or feet. In most cases, there are the same number of parts and the same kind of parts for each hand or foot. But, no matter how you try, you cannot get them to be identical in arrangement. We say that they are mirror images of each other.

Many molecules have something similar to the mirror image arrangement. The organism can use certain molecules but not others which are almost the same. In other words, it is as if the organism can tell the right hand molecules from the left hand ones and will take only the ones that it can use.

Biology. An excerpt from Assignment 1. (continued)

Try this. Have yourself blindfolded or just close your eyes tightly. Have a friend or relative come near you. Reach out and locate one of his ears.

Q7. After feeling the ear, tell how you know whether it is a right or a left ear. Why are you sure?

You may try many times, but you will never make a mistake. In somewhat the same way, the organism always recognizes the proper molecule.

Excerpts from Lesson Reports

You and the Law. Assignment 5.

6. By careful investigation, Otto Observant discovers that the house he leased from Reel S. Tate has been attacked by termites. (a) Does Otto have a duty to repair? (b) Does he have any other duties or rights? Explain.

Assignment 9, page 20

3. Maria Malicious sued the down-and-out actor Hal Haddit, claiming he was the father of her illegitimate child. The charge was published in all the daily newspapers and as a result of the publicity, Hal found work for the first time in twenty years. After the charges were dismissed as completely unfounded, (a) Could Hal sue Maria for malicious prosecution? (b) Could he sue her for anything else? Give reasons for your answers.

4. Bob Ados believes in voodoo. In the presence of his enemy, Jim Akun, he sticks pins in a voodoo doll of Jim, intending that Jim really be injured. Should Jim be allowed to sue him? Explain your answer.

Real Estate Brokers' Preparation. Assignment 8.

21. An Oriental gentleman answers your advertisement of a house owned by a seller in an "all white" neighborhood. You are not positively sure how the seller will react, but you are certain that the seller's neighbors and certain other brokers will blackball you if you sell to a non-white buyer. You know you cannot survive as a real estate broker in your conservative town unless the residents are willing to list their houses with you. The prospect walks into your office, personally, with your advertisement in his hand, and gives you the following information:

    ----he knows the house is still for sale (this is true).
    ----he wants to make a deposit of $1,000.
    ----he is ready, able and willing to pay your advertised price.
    ----he wants you to take his offer to your principal, the seller.

How would you handle this sensitive situation? Exactly what would you say to (a) the prospect, (b) the owner, (c) other brokers and (d) nearby residents.

American History. Assignment 14.

3. "The Civil Service idea is the most ridiculous thing ever attempted in ... politics." (Arnof, page 327) Give the arguments for and against this remark. Write at least two paragraphs.

American History. Assignment 15.

10. "There isn't a reactionary in these United States whose ideas can't be traced right straight back to the West in the late nineteenth century. The isolationists, the chauvinists, the fundamentalists, the anti-intellectuals--all of 'em sprang from that breeding ground." Write a paragraph in support of this statement.

Assignment 18.

9. Big Bully. Big Bluff. Big Brother. Good Neighbor. Which of these terms best describes the Monroe Doctrine at different periods in American history? Why?

Practical Economics. Assignment 14.

3. Which is more disastrous to a nation -- a major war or a major depression?

9.&10. Describe our entire marketing system by comparing it with a specific part of the economic system or with some non-economic activity. You might, for example, point out the similarities between the marketing system and the telephone system. On the other hand, you might compare the distribution of goods with the functioning of the human body.

World History. Assignment 5.

A. Describe a common American practice (such as making a routine phone call) as the practice might be described by a barbarian who had never seen a telephone before and didn't know what it was for. You may assume that the barbarian speaks good English and that he is talking to another barbarian who understands the language but not the customs. (Can you see us as other people see us?)

Assignment 30.

A. Mature nations are in an excellent position to extend help to underdeveloped nations. But does the help work in both directions? Can an underdeveloped African nation, for example, offer leadership to mature nations? Explain.

English IX. Assignment 9.

8. What makes this play funny or not funny? Are there any really witty lines or does Chekhov get his humor out of character and situation? Is it necessary to see this play on the stage in order to appreciate it fully? How can the reader best enjoy a play such as this one?

Assignment 12.

8. How much of The Odyssey is literally true and how do you know that it is true? How much of it is not literally true but is true-to-life? Explain. How much is just a good story? (Hint: Is there possibly an overlapping of categories?)

Assignment 16.

5. Is Romeo and Juliet really an ideal love story? Why or why not? By what standards are you judging the actions and feelings of the two lovers?

Algebra I. Assignment 6.

Mary's age is four times Esther's and the sum of their ages exceeds their difference by 12. Find their ages.

Assignment 11.

The sum of Mary's and Richard's ages is 14. In 2 years Mary will be twice as old as Richard. What are their present ages?

Algebra II. Assignment 14.

4. Two of the sides of a military camp were 4 miles and 6 miles and the angle between them 35.6°. Find the area of the camp.

Chemistry. Assignment 3.

28. (a) What is the relationship between an atom containing 10 protons, 10 neutrons, and 10 electrons, and one containing 10 protons, 11 neutrons, and 10 electrons?
(b) What is the relationship between an atom containing 10 protons, 11 neutrons, and 10 electrons and one containing 11 protons, 10 neutrons, and 11 electrons?

Assignment 4.

28. (a) If energy must be supplied to remove an outer shell electron from an atom, which is more stable, the atom or the resulting ion? (b) If energy is released during the addition of an electron to a neutral atom, which is more stable, the atom or the resulting ion?

Assignment 5.

34. Hydrogen and sulfur form a simple molecular compound. Using both orbital notation and electron-dot notation, show how such a compound may be formed, and determine its probable molecular formula.

Biology. Assignment 1.

Some of the questions for the first assignment in Biology were included with the study notes. Refer to the excerpt under Examples of Study Notes or Discussion Material.

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